



# DECUS

## PROGRAM LIBRARY

DECUS NO.	8-239
TITLE	PAL III/EDITOR 8K LINK PATCH
AUTHOR	Charles Schultz, Jr.
COMPANY	Schultz Instruments, Inc. Gainesville, Florida
DATE	August 18, 1969
SOURCE LANGUAGE	PAL III



## PAL III/EDITOR 8K LINK PATCH

DECUS Program Library Write-up

DECUS No. 8-239

### ABSTRACT

This patch allows the Editor to call PAL III as if PAL III were the high speed punch. It will allow the user to obtain a binary tape and any associated diagnostics before having to punch out a symbolic listing, thereby saving time on debug runs. Time savings on the order of five-to-one are easily possible. Naturally, since the patch replaces the high speed punch routines in the Editor and the high speed reader routines in PAL III, these units cannot be used with this patch. However, both programs will behave normally with regard to the low speed reader and punch. The action of switches 0 and 1 in regard to the Editor have been reversed in order to provide for a correct listing during pass three of PAL III.

To load programs: Using the binary loader, load the Editor into Field 0 and PAL III into Field 1, then load the patch. Set 200 in the address register; press Start. You are now in the Editor mode, with the following modifications: Set switch 0 if spaces are to be read as is, through the low speed or high speed reader; set switch 1 if spaces are to be substituted for tabs on punching on the low speed reader.

After the source program has been properly written using the Editor (don't forget the \$ at the end of the program), to get an assembly, set switch 10, type P Return, turn on the low or high speed punch, set switches 0 and 1 for the proper PAL III pass, and press Continue. The program will automatically return to the Editor upon completion of the assembly. Repeat the above procedure for the remaining desired passes of PAL III.

To obtain a normal source tape, turn off switches 0, 1, and 10, and obtain the normal Editor punch out, using the low speed punch.

To use PAL III normally, set 110200 in the switch register, Load Address, and Start. PAL III is now operating normally through the low speed reader and punch.



# PAL III / EDITOR 8K LINK PATCH

## EDITOR MODIFICATIONS

		CDF=6201		
		CIF=6202		
		FIELD 0		
		*1446		
1446	7710		SPA CLA	/REVERSE SPACE TEST
		*1106		
1106	7700		SMA CLA	/REVERSE OUTTAB REST
		*1244		
1244	5172		JMP PALIN	
1245	1072	EDR,	1072	
		*1153		
1153	0000	OUTH,	0	
1154	6212		CIF 10	
1155	6211		CDF 10	
1156	4760		JMS I OUTH+5	
1157	5753		JMP I OUTH	
1160	1455		READIN	
		*0172		
0172	6212	PALIN,	CIF 10	
0173	6211		CDF 10	
0174	5575		JMP I PALIN+3	
0175	1434		PALS	

## PAL III MODIFICATIONS

		FIELD 1		
		*1426		
1426	0000	HIREAD,	0	
1427	7410		SKP	
1430	5243		JMP EDRT	
1431	6202		CIF	
1432	6201		CDF	
1433	5655		JMP I READIN	
1434	1265	PALS,	TAD INOP	
1435	3227		DCA HIREAD+1	
1436	1265		TAD INOP	
1437	3671		DCA I SPALJ	
1440	1270		TAD EDRJ	
1441	3255		DCA READIN	
1442	5667		JMP I P200	
1443	1264	EDRT,	TAD ISKP	
1444	3227		DCA HIREAD+1	
1445	1264		TAD ISKP	
1446	3671		DCA I SPALJ	
1447	1273		TAD RHLTI	
1450	3057		DCA NEXI	
1451	5227		JMP HIREAD+1	
1452	1272	RHLT,	TAD NEXS	
1453	3057		DCA NEXI	
1454	5227		JMP HIREAD+1	
1455	0000	READIN,	0	
1456	7450		SNA	
1457	5227		JMP HIREAD+1	
1460	1266		TAD N200	
1461	7450		SNA	
1462	5227		JMP HIREAD+1	
1463	5275		JMP GETCHR	
1464	7410	ISKP,	SKP	
1465	7000	INOP,	NOP	
1466	7600	N200,	-200	
1467	0200	P200,	200	
1470	1245	EDRJ,	EDR	
1471	0204	SPALJ,	204	/HREAD TEST IN START
1472	0241	NEXS,	0241	
1473	1452	RHLTI,	RHLT	
		*1475		
1475	1267	GETCHR,	TAD P200	
		*57		
0057	0241	NEXI,	0241	



## SYMBOL TABLE

CDF	6201
CIF	6202
EDR	1245
EDRJ	1470
EDRT	1443
GETCHR	1475
HIREAD	1426
INOP	1465
ISKP	1464
NEXI	0057
NEXS	1472
N200	1466
OUTH	1153
PALIN	0172
PALS	1434
P200	1467
READIN	1455
RHLT	1452
RHLTI	1473
SPALJ	1471